

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2005/002168

International filing date (day/month/year)
18.07.2005

Priority date (day/month/year)
23.07.2004

International Patent Classification (IPC) or both national classification and IPC
F04D29/38, F04D29/32

Applicant
SPAL AUTOMOTIVE S.R.L.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/002168

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2005/002168

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-21
	No: Claims	
Inventive step (IS)	Yes: Claims	1-21
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-21
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

1. Reference is made to the following documents:

- D1: EP-A-0 945 625 (SPAL S.R.L) 29 September 1999 (1999-09-29)
- D2: EP-A-1 016 788 (HALLA CLIMATE CONTROL CORP) 5 July 2000 (2000-07-05)
- D3: EP-A-0 557 239 (CARRIER CORPORATION) 25 August 1993 (1993-08-25)

2. INDEPENDENT CLAIM 1

The application does not meet the requirements of Article 6 PCT, because claim 1 is not clear for the following reasons:

- 2.1** Claim 1, which is directed to an axial flow impeller, seeks to define the invention by reference to features relating to a second unclaimed entity, namely the electric motor ("with a diameter greater than the diameter of the housing of the electric motor").
- 2.2** The expression "the blades include box-shaped portions that define a seat with a diameter" used in claim 1 is vague and leaves the reader in doubt as to the meaning of the technical features to which it refers (box-shaped portions), thereby rendering the definition of the subject-matter of said claim unclear, Article 6 PCT.
- 2.3** It is clear from the description on page 8, lines 8-14 and 29-32 and from page 10, lines 18-21 that the following features are essential to the definition of the invention:
 - (A) the box-shaped portions provide a connection, at least partially, between the hub and each blade;
 - (B) the seat created by the box-shaped portions allows electric motors to be fitted.Since independent claim 1 does not contain these features, it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

- 3.** In view of the foregoing objections, claim 1 has been interpreted as comprising the

characterising features consisting in that the blades include box-shaped portions, that provide a connection, at least partially, between the hub and each blade, and that define a seat with a diameter wherein a drive electric motor can be fitted.

Under the above hypothesis, the subject-matter of claim 1 appears to be new and inventive in the sense of Article 33 PCT.

4. Furthermore, contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1, D2 and D3 is not mentioned in the description, nor are these documents identified therein.